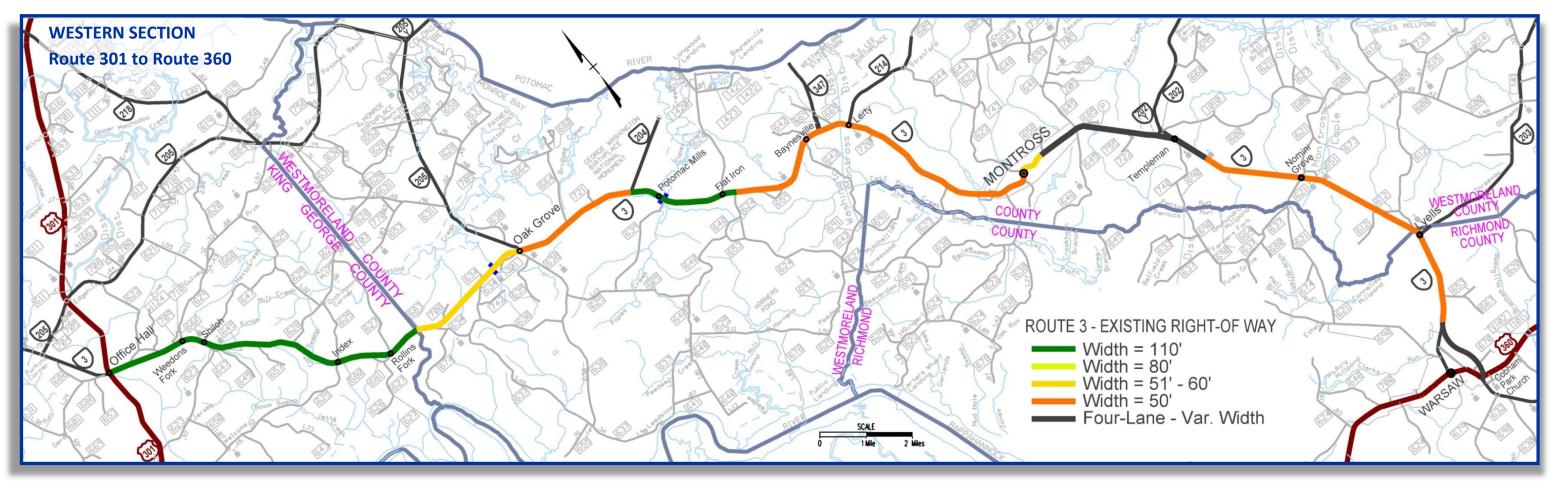
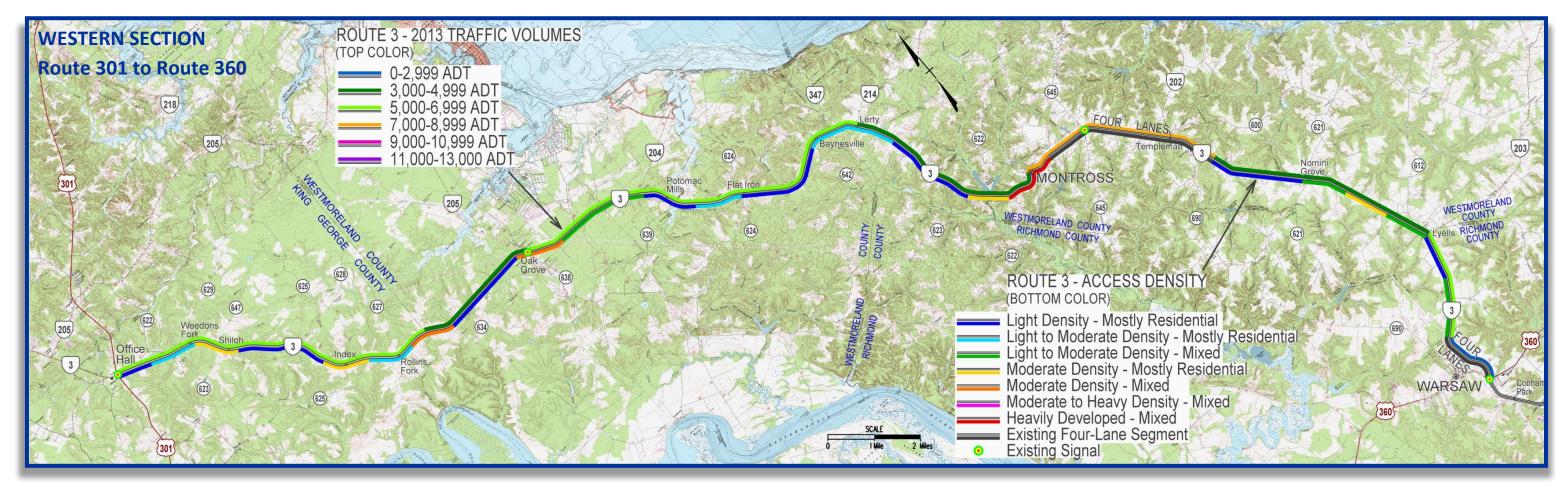
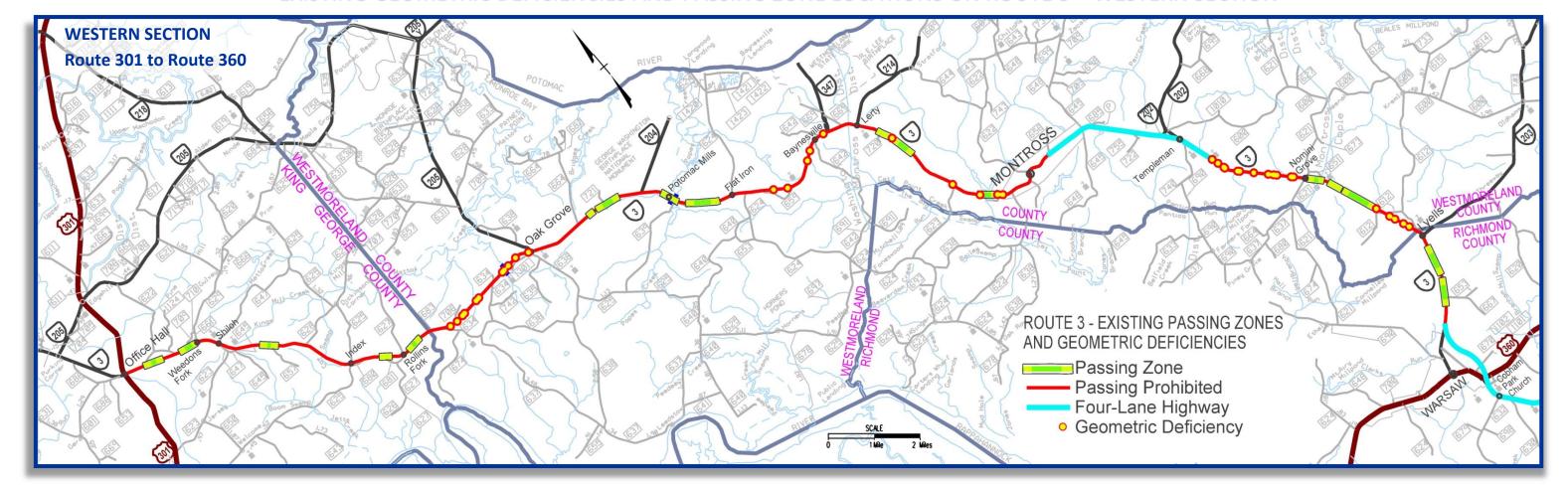


EXISTING RIGHT-OF-WAY WIDTHS AND TRAFFIC DENSITIES ON ROUTE 3 – WESTERN SECTION

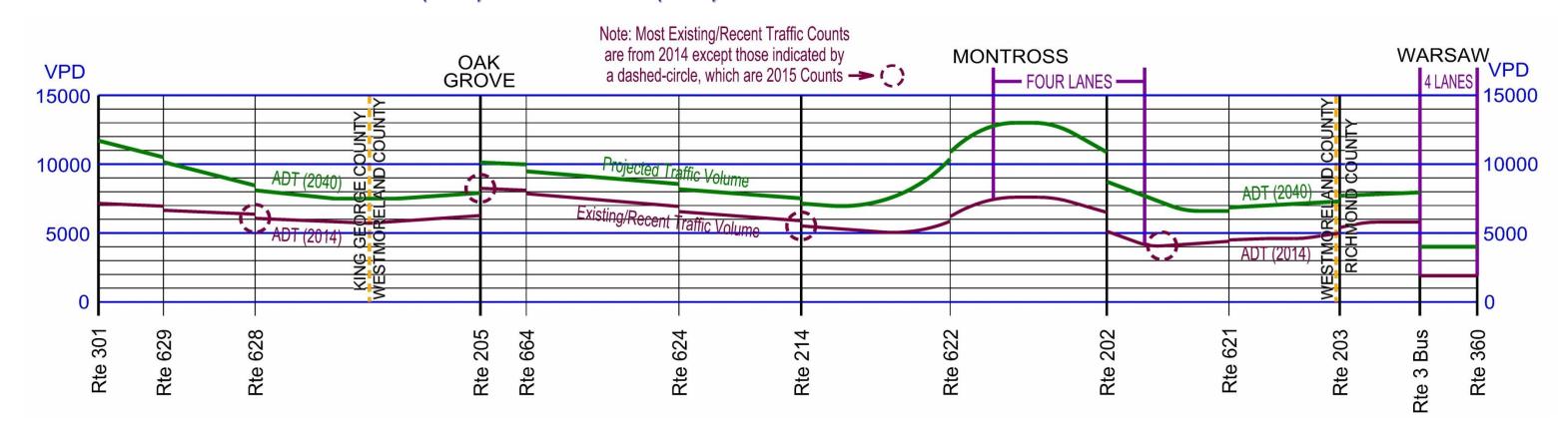


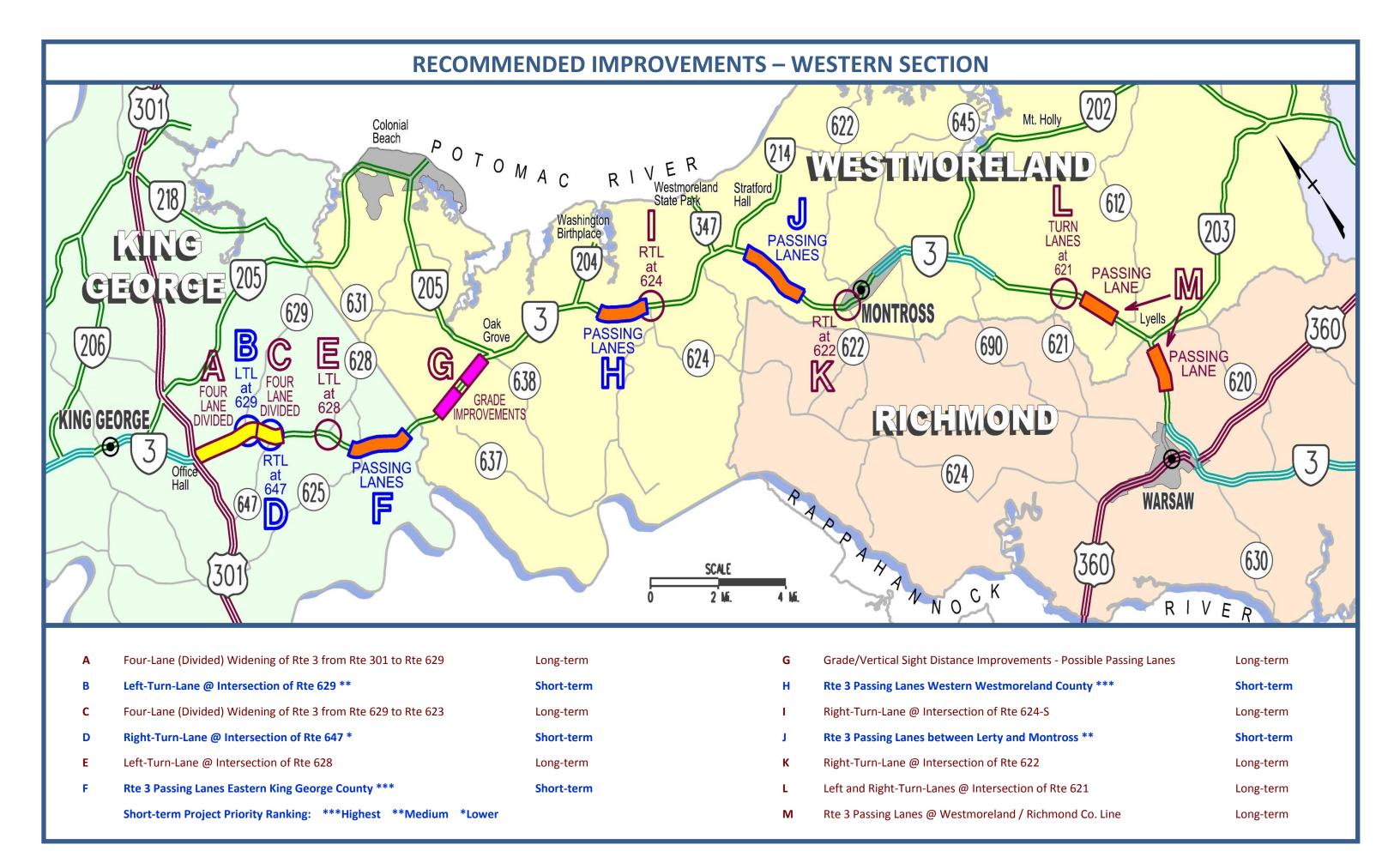


EXISTING GEOMETRIC DEFICIENCIES AND PASSING ZONE LOCATIONS ON ROUTE 3 – WESTERN SECTION



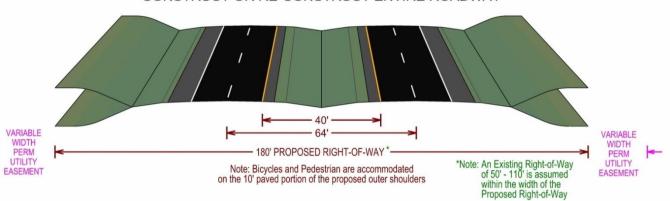
EXISTING (2014) AND PROJECTED (2040) TRAFFIC VOLUMES ON ROUTE 3 – WESTERN SECTION



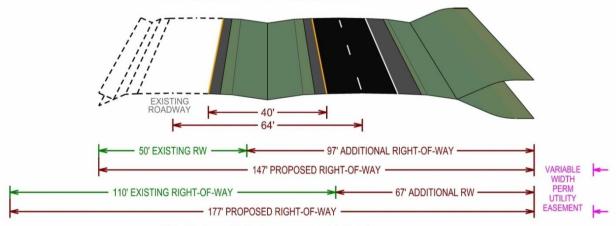


DRAFT PROPOSED TYPICAL SECTIONS - FOUR-LANE-DIVIDED

A. TYPICAL FOUR-LANE DIVIDED RURAL MINOR ARTERIAL HIGHWAY GRADED MEDIAN - 60 MPH DESIGN SPEED CONSTRUCT OR RE-CONSTRUCT ENTIRE ROADWAY

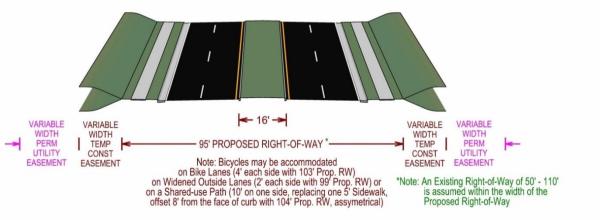


B. TYPICAL FOUR-LANE DIVIDED RURAL MINOR ARTERIAL HIGHWAY GRADED MEDIAN - 60 MPH DESIGN SPEED CONSTRUCT PARALLEL LANES



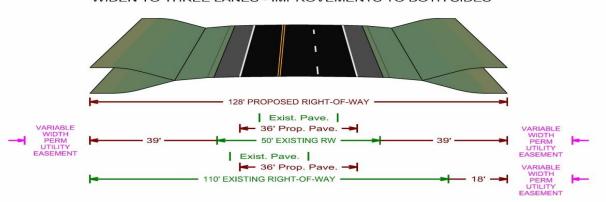
Note: Bicycles and Pedestrian are accommodated (single direction) on the 10' paved portion of the proposed outer shoulder

C. TYPICAL FOUR-LANE DIVIDED URBAN MINOR ARTERIAL HIGHWAY RAISED MEDIAN - MAX. 45 MPH DESIGN SPEED CONSTRUCT OR RE-CONSTRUCT ENTIRE ROADWAY

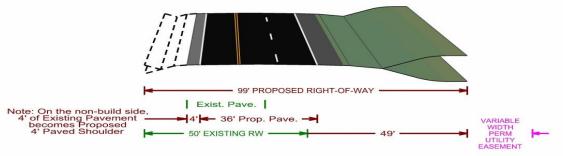


DRAFT PROPOSED TYPICAL SECTIONS - PASSING LANES

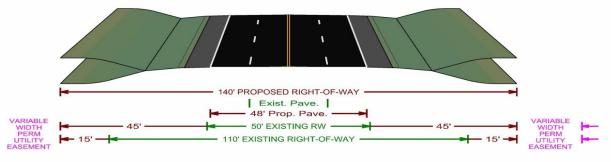
D. TYPICAL THREE-LANE (PASSING LANE) RURAL MINOR ARTERIAL HIGHWAY 60 MPH DESIGN SPEED WIDEN TO THREE LANES - IMPROVEMENTS TO BOTH SIDES



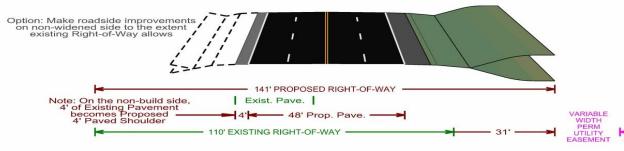
E. TYPICAL THREE-LANE (PASSING LANE) RURAL MINOR ARTERIAL HIGHWAY 60 MPH DESIGN SPEED WIDEN TO THREE LANES - IMPROVEMENTS TO ONE SIDE



F. TYPICAL FOUR-LANE-UNDIVIDED (PASSING LANES) RURAL MINOR ARTERIAL HIGHWAY 60 MPH DESIGN SPEED WIDEN TO FOUR LANES - IMPROVEMENTS TO BOTH SIDES



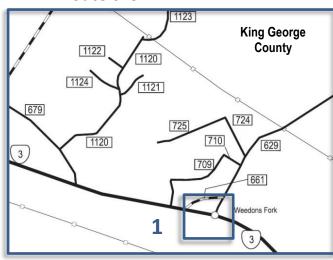
G. TYPICAL FOUR-LANE-UNDIVIDED (PASSING LANES) RURAL MINOR ARTERIAL HIGHWAY 60 MPH DESIGN SPEED WIDEN TO FOUR LANES - IMPROVEMENTS TO ONE SIDE



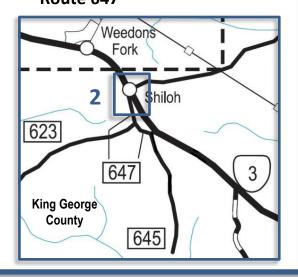
PASSING LANE DESIGN TYPICAL SINGLE-DIRECTION PASSING LANE THREE-LANE TYPICAL SECTION → 200' Lane-Addition Passing Lane Lane-Drop Taper Taper Total Length of 36' Wide Pavement = Min. 3500' to 4820' TYPICAL TWO-DIRECTION PASSING LANES FOUR-LANE TYPICAL SECTION 1 200' H → 200' ► Min. 2640' to 3960 Lane-Drop Passing Lane — Total Length of 48' Wide Pavement = Min. 3500' to 4820' — Total Length of Four-Lanes plus 4' Median = Min. 4160' to 5480' * NOTE: If the use of a 4' Raised Median is required on a two-direction passing lane location (four-lanes wide), the width of the pavement (e.p. to e.p.) will increase by 6' to 54' wide. This will lengthen ALL 660' transitions to 990' and ALL 330' transitions to 495' where the posted speed limit is 55 MPH. Pavement Transitions will increase, as well. Pavement Transitions will be 990' for 18' Shifts (all to one side) and 495' for 9' Shifts (symmetrically on both sides). **PAVEMENT TRANSITIONS** Generally, a Passing Lane design (above) will be paired with one Pavement Transition on each end. 12' Shift Right to 3-Lanes * Passing Lane with a 200' Lane-Add Taper on one end and a 660' Lane-Drop Taper on the other end 12' Shift Left to 3-Lanes * will have a 660' Pavement Transition attached to both ends, yielding an overall Total Length of 6140'. Actual total lengths for a single passing lane location may be shorter (by utilizing a passing lane length of less than 3960' or by using symmetrical pavement widening transitions) or the total length for a single 6' Shift Both Sides to 3-Lanes * Left Turn Lane to 3-Lanes The average set of End-to-End Passing Lanes has a total length of 10,880', consisting of two 3960' passing lanes, two 660' pavement transitions, two 200' lane-add tapers, two 660' lane-drop tapers, and one 320' safety buffer zone between the lane-drop tapers. This can be reduced to an overall length of 8640' by utilizing the 2640' minimum length 12' Shift Both Sides to 4-Lanes* → 200' | 200' Left Turn Lane to 4-Lanes

RECOMMENDED PRIORITY SAFETY IMPROVEMENTS - WESTERN SECTION

1. Left-Turn-Lane eastbound at Route 629



2. Right-Turn-Lane eastbound at Route 647



RECOMMENDED PRIORITY PASSING-LANE LOCATIONS WESTERN SECTION





OTHER RECOMMENDED IMPROVEMENTS - WESTERN SECTION

SHORT TERM

Construct a set of Passing Lanes on Route 3 in central Westmoreland County between Route 214 and the Town of Montross. Note: This is Passing Lane Priority #3 in the Western Section.

LONG TERM / AS WARRANTED

Construct Turn-Lanes on Route 3 as warranted at the intersection of Routes 621, 622, and 624 in Westmoreland County.

Construct Left Turn Lane on Route 3 as warranted at the intersection of Route 628 in King George County.

Construct Divided, Four-Lane Improvements on Route 3 beginning at Route 301, to be advanced to construction as traffic dictates. The most likely first phase would carry the improvements beyond the intersection of Route 629. The need for this will largely be driven by future development patterns in central King George County.

Construct improvements to the grade of Route 3 between the King George/Westmoreland County Line and Oak Grove. This will be an expensive project and should be considered only if lower-cost alternatives such as paved shoulders and centerline rumble stripe prove ineffective. If re-grading is constructed, passing lanes should also be considered for this location.

Construct a set of Passing Lanes on Route 3 in eastern Westmoreland County and western Richmond County. Note: This is Passing Lane Priority #4 in the Western Section.